

Jan Magne Gjerde

STONE AGE ROCK ART AND BELUGA LANDSCAPES AT RIVER VYG, NORTH-WESTERN RUSSIA

Abstract

One of the largest concentrations of Stone Age rock art in northern Europe is situated at the estuary of River Vyg by the White Sea, north-western Russia, where more than 2300 figures have been recorded. A unique feature of the Vyg rock art are the numerous whale hunting scenes. The rock art is dated to between 5300 and 2000 BC, although the dating is controversial. This paper focuses on how rock art interacts with the landscape on different levels. Through a series of case studies, it is shown how natural features are intertwined with rock art, and how the places themselves might reveal why the figures or scenes are positioned in the way they are. The paper relates the rock art to the micro-landscape and the macro-landscape of the River Vyg area. Ethnographic sources are applied to shed light to the prehistoric landscapes and the whale hunting in particular. These suggest that whale hunting at River Vyg included rituals and communication between people, animals and the spirits. The making of rock art, or telling stories, may have been a central part of this communication.

Keywords: rock art, landscape, white whale, beluga, Stone Age, White Sea, Russia

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INTRODUCTION

The study of rock art and landscapes during the last decades can be seen as forming three related subdivisions. The first is the study of topography or macro-landscape in relation to a rock at site or its wider landscape, such as mountains and rivers (Mandt 1972; 1978; Sognnes 1983; 1987). Second, the micro-landscape (miniature landscape) or the rock surface can be studied as an element invested with meaning, interwoven with the figures of rock art (Lewis Williams & Dowson 1990; Helskog 2001; 2004; Gjerde 2006; 2010a). And third, there is the phenomenological approach to landscape and rock art, where elements of perception and cognition are central to interpretation (Bradley 1991; Tilley 1994). Most often studies favour one over the other and the approaches are rarely combined. This paper is an attempt to view rock art and topography in an interwoven landscape, where the rock, the rock art and the landscape are all intertwined.

Benjamin Smith and Geoffrey Blundell (2004) have criticized landscape-based analyses of rock art, claiming that they tread on dangerous ground

and focus too much on macro-topographical elements. They argue that this approach leads us to miss out on meaningful details and ‘small features’, which in the light of ethnographic sources were often meaningful. Thereby, ‘...if phenomenological approaches are to live up to their promise of ‘a new perspective’, it is precisely these elements that we need to consider if we are to avoid simply imposing the Western gaze on the archaeological record’ (Smith & Blundell 2004: 248). On the other hand, a focus on the micro-landscape – where small features are interpreted as interacting with rock art – has been labelled ‘subjective’ and interpretations based on them have been shrugged off as coincidental (Bednarik 2004). However, numerous examples from Arctic ethnography demonstrate that both conspicuous topographical features and small features were embedded with meaning (Manker 1957: 23ff). One should therefore not pursue one over the other; instead, we should see rock art as interacting with landscape on several scales (Gjerde 2010a).

The rock surface associated with the figures has been interpreted as laden with meaning and

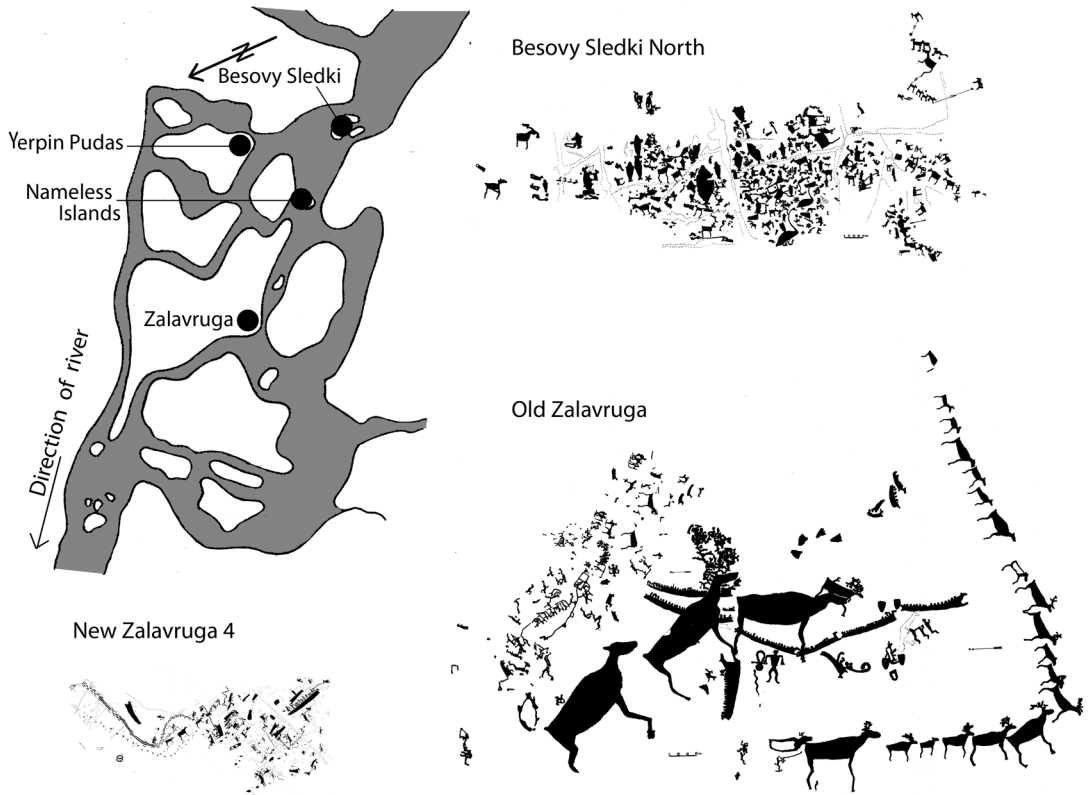


Fig. 1. Map of the rock art sites of the lower River Vyg area. Map adapted from Kosmenko & Kochkurkina (1996:138) and Savvateyev et al. (1978: plate 1).

sometimes even acting as a visual representation of the physical landscape (Lewis Williams & Dowson 1990; Ouzman 1998; Helskog 1999; 2001; 2004; Nash 2000; Lewis-Williams 2002; Keyser & Poetschat 2004; Gjerde 2009; 2010a; 2010b). According to the San (Bushmen) of South Africa, the rock face constitutes an interface between this world and the spirit world (Lewis Williams & Dowson 1990). As Sven Ouzman (1998: 36) writes:

Steps, cracks and the like were construed as pathways which connected the two worlds. These pathways could only be followed by shamans and inhabitants of the spirit world [...] rock-paintings are not so much images put *on* to the rock surface as experiences of the spirit world brought out *from behind* the rock face.

Similar observations have been documented amongst the Algonquian peoples of North America, who believed that cracks, crevices and cave entrances in cliffs and rocks served as passageways for spirit beings (Arsenault 2004:

299ff). At several rock painting sites the painted cliff has clear anthropomorphic features. This has been documented in Finland (Sarvas 1975: 46f; Lahelma 2008), Norway (Slinning 2005) and Sweden (Fandén 2002). Having visited several of these sites, I am convinced that the 'face' in the rock is part of the reason why rock art was made at these cliffs, and finding such formations connected to rock art over such a large geographical area can hardly be a coincidence. Interpretation of interaction between natural features and rock art may be subjective; however, these relations seem to be a recurring phenomenon in large parts of the world. It has even been suggested that stories may already 'have been there' in the rock and the figures only needed to be added.

Few studies have tried to incorporate the different levels of landscape that may be observed in rock art. However, studying rock art and landscapes at different levels – including macro-landscapes, micro-landscapes and the perception of landscapes – can potentially offer us a better understanding of rock art. Landscapes are constantly

changing, and changes in the environment and landscape affect the way we relate to landscapes. The major changes in the landscape, evident in a long time perspective, make it important to reconstruct the Stone Age landscape – including all of its physical features. This approach will move us closer to some of the lost relations of Stone Age rock art.

DATING THE ROCK ART OF RIVER VYG

The Vyg rock art area is located near the village of Vyg Ostrov in the lower reaches of the River Vyg, about 8 km from the town Belomorsk by the White Sea, north-western Russia (Fig. 1). The first carvings were discovered in 1926 and documented by A.M. Linevskiy (1939). The area first discovered was given the name Besovy Sledki (Savvateyev 1977a: 67). In 1936, V.I. Ravdonikas found new carvings on the same island and two panels with carvings about 400 m downstream from Besovy Sledki on an island called Yerpin Pudas. He also found the first carvings at Zalavruga, later named Old Zalavruga (Ravdonikas 1938). A massive archaeological investigation was initiated due to the construction of a major hydropower station and associated dams in the area. This changed the landscape dramatically. The investigations, which began in 1957 and continued until the early 1970s, revealed more than 100 settlement sites and more rock art (Savvateyev 1977a: 67; 1988). Altogether 26 new panels with rock art, covered by gravel or sand sediments and elements of cultural layers, were revealed by Yu.A. Savvateyev. This area with the 26 panels is now known as New Zalavruga. Previously unknown rock art was also found in the area between Besovy Sledki and Zalavruga: in 1968–69 four panels were located on small islands known as ‘Nameless Islands’, while one panel (the largest of the group) was found on Yerpin Pudas (Yerpin Pudas 3) (Savvateyev 1977a: 69).

A number of new figures were discovered also during my own fieldwork in 2003 and 2004, and during the last few years new figures have been discovered at previously documented panels (Lobanova 2006; 2007). The newly found figures at Vyg show the same range of motifs as the early discoveries, and are located on similar elevations. A careful estimate of the Vyg rock art would suggest that there are more than 2300 individual

Table 1. The Vyg rock art area: sites & panels.

| Site | m asl | N |
|----------------------|-----------|------|
| Besovy Sledki North | 19.5 | 470 |
| Besovy Sledki South | – | 60 |
| Yerpin Pudas 1 | 17.9 | 30 |
| Yerpin Pudas 2 | – | 7 |
| Yerpin Pudas 3 | 19.5 | 120 |
| Nameless Islands 1–4 | 15.2–15.7 | 31 |
| Old Zalavruga | 14.5 | 216 |
| New Zalavruga 1–27 | 14.9–16.7 | 1176 |

carvings recorded (Table 1). As with the rest of the Stone Age rock art in northern Fennoscandia, the selection of animals is focused on large game, and the main themes involve hunting; whale hunting, elk hunting, bear hunting and fowling. The wide range of motifs also includes human figures (some bearing artefacts), elk-head boats, bear, elk, geese, reindeer and swan. One of the main motifs at Vyg is the beluga whale, with more than 60 scenes of whale hunting from boat documented.

The chronology of Vyg rock art is still a matter of controversy. It has been suggested that the initial phase at Besovy Sledki may have been as early as the early 4th millennium BC (Stolyar 2000: 164f), but the rock art is generally dated from the late 3rd millennium BC to the very beginning of the 2nd millennium BC (Savvateyev 1977a: 83). The dating is a combination of results suggested by several different methods. First of all, geological shoreline dating methods have been applied (Devyatova 1976; Savvateyev 1970; 1977a; 1977b; Savvateyev et al. 1978; Sawwatejew 1984). Secondly, the age of the carvings has been estimated in relation to adjacent excavated settlements, which in turn have yielded diagnostic artefacts and radiocarbon datings (Savvateyev 1988; Stolyar 2000; Tarasov & Murashkin 2002). Thirdly, a minimum age is suggested by the ‘beach’ or ‘river’ sediments covering some of the panels, and which sometimes feature datable remains of human occupation (Savvateyev 1977a: 82f). Other dating methods are motif superimposition (Ravdonikas 1938; Savvateyev 1970; Stolyar 1977; 2000) and horizontal stratigraphy (Stolyar 1977; 2000).

The dating offered by Savvateyev, which is based on E.I. Devyatova’s (1976) work, is still endorsed in Russia and supported by both A.M. Zhulnikov (2006) and N.V. Lobanova (2007), both of who date the initial carving phase to 6000–5000 years BP or c. 4000–3000 BC (Zhulnikov 2006;

Fig. 2. A pod of swimming belugas. Photo: Kit Kovacs and Christian Lydersen (Norwegian Polar Institute).



Lobanova 2007: 134f). Recently, a new dating for the Vyg carvings has been independently put forward by L. Janik (2010) and J.M. Gjerde (2010b). Both studies rely on the geological data (Devyatova 1976; Kaplin & Selivanov 2004: 30–2), but emphasize a relative chronology based on comparison with the settlement data, and argue that the rock art is older than previously thought. Janik (2010: 94) dates it between c. 5600 BP and 4000 BP (4600–2000 BC), while Gjerde suggests a range between c. 5300 and 2000 BC. The internal chronology of the art is problematic, although it is possible to divide the figures into phases based on their elevations and the radiocarbon dates from the adjacent settlements, suggesting that there is a relational chronology based on the land uplift (Gjerde 2010b: 291–300).

THE BELUGA

When studying depictions of animals in rock art it is important to investigate also the behaviour of the animals, as well as their natural environment. This may yield information on why the animal is depicted, how it is depicted, and on the relations between figures and scenes. When humans are depicted interacting with the animals, as in the whale hunting scenes at River Vyg, this becomes even more important.

As noted, one of the most frequently depicted animals at the River Vyg rock art is the beluga (*Delphinapterus leucas*; Fig. 2), also known as the white whale (Watson 1988 [1981]: 166), which is still today present at the White Sea (Boltunov & Belikov 2002: 150). The social life of the beluga is based on pods of up to 10 whales centred

on a female with several young of various age. There are also exclusive masculine groups of 3–15, which merge with the harem groups only during the breeding season. The beluga are large animals. The male individuals can be up to 5.5 m long and weigh between 1100 and 1600 kg, while the female can be up to 4.1 m long and weighs between 700 and 1200 kg.

During migrations from the feeding grounds in the north, beluga whales sometimes congregate in vast autumn herds which comprise several hundred individuals (Watson 1988 [1981]: 166f; Brodie 1989: 135). This type of flocking of belugas observed in Canada also occurs at the White Sea (Boltunov & Belikov 2002: 158). In general, the behaviour of the White Sea beluga does not differ much from those of the Canadian Arctic, even though their numbers are fewer in the White Sea region, probably as a result of mass hunting and overexploitation of the animal in the Historical Period.

During the summer and autumn, belugas can frequently be seen at rivers or river estuaries. There are four reasons for this: mating, calving, feeding, and scratching of the protective chalk layer (Watson 1988 [1981]: 166f; Lucier & VanStone 1995: 80). Breeding takes place in the spring and the birth (calving) in the warmer shallow waters of estuaries and rivers around midsummer. In the White Sea, these are summer and autumn activities due to the ice covering at other times of year. It is not unusual to see accidentally beached belugas; however they often survive and escape with the next tide (Brodie 1989: 132).

BELUGA LANDSCAPES

In seeking relevant analogies and ethnographic data, it is important to look for societies that live in the same 'animal worlds' as reflected by the archaeological record (Helskog 2001: 4). Thus, in order to understand the beluga scenes of Vyg rock art, ethnographic accounts of the traditional hunt are crucial. I have not been able to find good descriptions of this for the Russian Arctic. The best ethnographic records of 'traditional' beluga hunting comes from northernmost North America, which also presents some interesting archaeology related to the practice. There are a few places where one can still observe the traditional beluga hunt or beluga drives (McGhee 1974; Savelle 1994; 1995; Friesen & Arnold 1995; Lucier & VanStone 1995; Friesen 1999). The topographical setting would dictate whether beluga drives, such as at Sisualik, would be the best hunting strategy or whether individual hunts would be more profitable as is the case at Eschsholtz Bay (Lucier & VanStone 1995: 80). Other landscapes favourable for the hunting of beluga are also documented (e.g. Friesen & Arnold 1995; Lucier & VanStone 1995; Savelle 1995).

One of these large hunting places, or 'beluga landscapes', is in the McKenzie River delta area in Canada, where Robert McGhee (1974: 19) describes the hunt and the associated landscape:

The estuary narrows rapidly upstream, and divides into a complex of narrow channels running between shoals, bars, and flat silt islands. This estuary is rich in fish which is attracted by food carried in the warm fresh water, and the fish in turn attract herds of beluga which can be seen feeding in the bay almost daily during the summer months. This situation forms a unique whale trap which when used by a large and well-coordinated hunting team, could yield a great supply of whale meat and oil with little outlay of effort.

In the McKenzie area whale meat and fish were cached (dug into the ground) to last the whole winter, thereby securing a year-round supply of food (Stefansson 1914; McGhee 1974: 22). The McKenzie River delta is a perfect place for whale hunting. However, the landscape has been changing in this area due to changes in the river estuary. Two of the bigger hunting sites were

abandoned because the belugas could no longer swim further up the river¹, and hunting most likely moved to Kittegaryumiut (McGhee 1974: 85). Ethno-historical evidence supports this idea: a local informant told to V. Stefansson that when the beluga no longer penetrated upstream to the villages, the villages were moved (Stefansson 1914; McGhee 1974: 91). This also shows that sites are likely to have moved several times in prehistory due to changes in the local topography. Similar changes, related to the land uplift and changes in the river, are likely to have occurred at the River Vyg delta during the Stone Age.

BELUGA LANDSCAPES AT RIVER VYG

The large rock art area at Vyg is accompanied by an impressive settlement record (Savvateyev 1977b; 1988). The depiction of belugas in the rock art and the beluga bones at the dwelling site of Zalavruga 4 show that the beluga indeed was present in the Vyg area (Savvateyev et al. 1978). However, the osteological material recovered from dwelling sites adjacent to the rock art is small and fragmentary. The identified bone material shows a remarkable dominance of sea mammals, with seal being by far the dominating species, while beluga bones are rather uncommon. There are two probable reasons for this.

The first is the 'schlepp-effect', introduced by Perkins and Daly (1968), or the practice of butchering large animals at the hunting site, leaving the large bones at the kill site. According to Giddings and Anderson (1986: 319) whales were butchered on the shoreline and only the flesh, blubber, skin and occasionally the rib cages were taken to the campsites. The practice of leaving the whale carcasses on the shoreline has been documented in the archaeological record, the ethnographic record and in historic times (McGhee 1974; Giddings & Anderson 1986; Lucier & VanStone 1995: 7; Savelle 1995: 132f). If this was the case with whale hunting at Stone Age River Vyg as well, the whale bones would have been left at the shore while the meat and blubber were taken to the settlements, resulting in few beluga bones ever making it into the archaeological record of the settlements.

The second reason, which also emerges from the ethnographic record, is of an ideological/religious nature. According to M. Lantis (1938: 445): 'The ritual treatment of bones, on the other

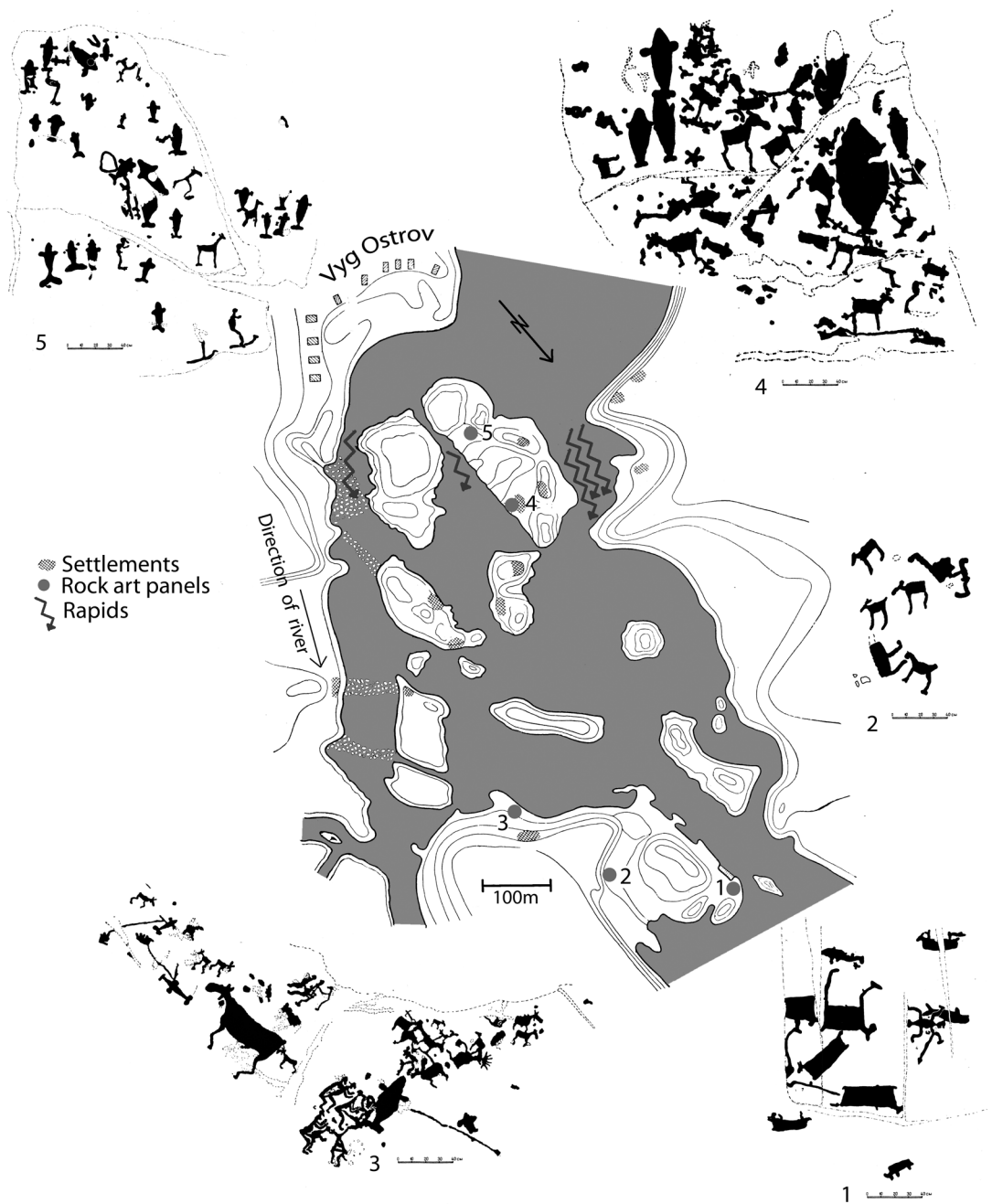


Fig. 3. Beluga landscapes at River Vyg: the Besovy Sledki/Yerpin Pudas area. Base map adapted from Ravdonikas (1938: 14, plate 4), with information added by the author. The different sections in tracing 1 (Yerpin Pudas 1) have been put together in Photoshop based on Ravdonikas (1938: plate 20). Tracing 2 (Yerpin Pudas 2) is made from a photo in scale. Tracing 3 (Yerpin Pudas 3) is according to Savvateyev (1977a: 72, figure 15). Tracing 4 (Besovy Sledki North) is a section of the panel as recorded by Ravdonikas (1938: plate 22). Tracing 5 (Besovy Sledki South) is likewise according to Ravdonikas (1938: plate 32). All the tracings are in the same scale, with the small scale under each tracing representing 40 cm in length. Illustration: Jan Magne Gjerde.

BELUGA HUNTING AND RITUALS

hand, is connected with the idea that the whale's remains must be so treated that its soul will be uninjured and can be released to go back to the sea'. The ritual treatment of the bones and certain other parts of the large animals hunted, in order to secure the vivification of the animals, is common theme in the ethnographic record of the northern peoples (e.g. Lantis 1947). This secured a good hunt when the animals returned next year. Thereby, it is probable that there are both functional and ideological reasons for the underrepresentation of whale bones in the archaeological record.

If one looks at the topographic situation in the McKenzie River delta area and compares it with the River Vyg area, it is easy to observe a striking topographic resemblance. The mouth of River Vyg consists of a massive river estuary with narrow streams, further divided into a complex of narrow channels running between shoals, bars, and small islands or islets. Several places could have functioned as *cul-de-sacs* in the beluga hunt. This is best seen in the Besovy Sledki/Yerpin Pudas area (see Fig. 3). With a sea level raised to 19.5 m (the level of the lowest carvings at Yerpin Pudas 3 and Besovy Sledki North) the area below the Shoyrukshin waterfalls (or strong rapids) would have been a massive bay (see Fig. 3). The bay of shallow water between the rock art sites of Besovy Sledki North and Yerpin Pudas 3 would have formed a 'natural whale trap', with waterfalls forming a major obstacle that would have prevented the belugas from going further upstream. The evidence for a direct connection between the topography and beluga hunting is also strengthened by the distribution of the rock art motifs. The panels at Yerpin Pudas 3, Besovy Sledki North and Besovy Sledki South feature both individual belugas and beluga hunting scenes, while Yerpin Pudas 1 only includes a single beluga image and Yerpin Pudas 2 consists only of elk depictions, a human figure and a swan. Hence, the rock art panels that do not face the hunting places also do not feature representations of the actual whale hunt. Tim Ingold (2000: 195) writes: 'Just as the landscape is an array of related features, so – by analogy – the taskscape is an array of related activities.' At the rock carvings of River Vyg, we seem to find visualizations of the whale hunt at the very place where it actually happened. In other words, there could be a 'direct' link between the place of action (the whale hunt) and the action in the rock art (the whale hunt depicted on the rocks).

In order to understand rock art depictions of beluga hunt, it is important to look at the places and the rituals that could have been connected with the hunt. In the ethnographic record, elaborate rituals are connected with whale hunt, and it appears that evidence for similar rituals can be found in rock art. For hunter-gatherers, knowledge of the morphology of the animals hunted, the hunting place and the environment (e.g. seasonality) are equally important. Thus, all these elements are included in the rock art.

Tim Ingold (2000: 192) defines the character of a place through experience: 'A place owes its character to the experiences it affords to those who spend time there – to the sights, sounds and indeed smells that constitute its specific ambience'. But how are we to grasp or describe the experiences or the atmosphere of the past? The collective hunting, the communication and co-operation between the people, the smells, the colours, the perceptions of whale hunting (so visually expressed in the rock art), or the rituals associated with the whale hunt? The bay filled with red blood against the white colour of the whale. The blood washed up on the 'red beaches' that would stay red for some time. The sounds of the animals, the loud whirling from the beluga herd. The 'rolling raven-call' when the shaman or watch-leader saw the belugas and the silent visual 'language' and hushed communication when the hunters grouped quickly for attack and altered the hunt as belugas veered or turned about. The complete silence until the sign was given and it was time to frighten the prey. Then, the 'exciting events' would commence, with animals dashing about in the shallow water, sometimes causing the kayaks to overturn and people to be injured. Feasting and social events following a successful hunt (Lantis 1938: 446; Lucier & VanStone 1995: 69, 82f). The majority of these experiences will remain foreign to us. However, we can still try to interpret the rock art in the light of ethnographic sources including all the advantages and drawbacks of such an approach.

The more than 60 beluga hunting scenes at Vyg show that people have hunted belugas from boats, sometimes also accompanied by hunters on the shore. These scenes give us a good idea of whale hunting in the Stone Age (see Fig.

4). The largest scene includes several boats hunting together, with more than 50 people on board. This is an indication of the level of social interaction that must have accompanied the whale hunt at these beluga landscapes. From the ethnographic record we know that the gathering together of people for hunting belugas reinforced hunting partnership, cemented relations between participating societies and minimized inter-societal conflict (Lucier & VanStone 1995: 86). Some groups of people would live in the hunting areas throughout the year, while others would migrate to these beluga landscapes during the hunting season. In traditional hunting societies the hunting leader or shaman (often the same person) could come from any of the societies that co-operated in the beluga hunt (Lucier & VanStone 1995: 51, 86). Such co-operation would also strengthen the relations between the inland and coastal groups, as has been sug-

gested by B.C. Hood (1988) in a relation to the rock art concentration of Alta, northern Norway. An increasing amount of people living at these favourable nodes in the landscape of hunter-gatherers could have triggered changes in many aspects in society and even have advocated for a change in social organization.

The beluga hunting scenes in the Besovy Sledki/Yerpin Pudas area are represented by single boats (resembling an Eskimo *kayak*) occupied by one person. This is also the situation at Zalavruga, although at Zalavruga there also exist representations of collective hunting where several boats (resembling Eskimo *umiaks*) take part in the hunt. One of the hunting scenes at New Zalavruga 4 has also been interpreted as depicting the training or initiation of the whale hunters (A.D. Stolyar, pers.comm 2004).

A scene representing the dangers of whale hunting can be found at New Zalavruga 9 (see



Fig. 4. The impressive hunting scene at New Zalavruga 4 with 12 people in the boat. The whale hunter has just thrown the harpoon and the 'rope' is not tightened yet. Beneath it we see a bear hunting scene. Photo: Jan Magne Gjerde.

tracing in Savvateyev 1970: 253, plate 51), where people are 'thrown' out of the boat in connection with the whale hunt. In the ethnographic record, the dangers of the whale hunt are described vividly – '... accidents were common but drownings rare' (Lucier & VanStone 1995: 82) – and elaborate rituals associated with the hunt are described (Stefansson 1914: 126–8, 133–9; Lantis 1938; 1940; Lucier & VanStone 1995: 56–8). I would suggest that the dangers connected to the whale hunt could be one of the reasons why the rituals connected to it are so elaborate.

A recurring feature of the boat images in the Stone Age rock art of northern Fennoscandia is the so-called elk-head stem. A 40 cm long wooden elk figure, found in a bog at Lehtojärvi near Rovaniemi in northern Finland, has been suggested to be such a figurehead – part because of its size, part because it has a hole in the 'neck' that would suggest that it was mounted into something (Erä-Esko 1958). The presence of an elk-head on the stem of the boats could also be explained by the physical characteristics of the elk, such as its ability to swim more than 15 km (Farbregd 1980: 44). There are also several examples in Fennoscandian rock art where the antler of an elk figure is depicted like a boat figure (Lahelma 2005: 32).

Among various Arctic hunter-gatherer societies, the placing of an amulet or figurine in a boat was believed to make it part of the animal world (Brandstrup 1985: 148f, 156, 158). Flint amulets or figurines representing a whale, an elk or a bear have been found on Late Neolithic sites by the White Sea (Zamyatin 1948: 106). Similar whale figurines are also found among the Point Barrow Eskimo, who produced them out of various materials (Murdoch 1892: 435).

The animals used on the stem or in the boat as charms or amulets could vary. Stuffed seals have been equipped on the stems during the whale hunt (Thornton 1931: 165), as well as wolf skulls, dried ravens, seal vertebrae, tips of red fox tails and eagle feathers (Murdoch 1892: 275, 437). In the ethnographic sources the animal world and the human world are intertwined and the strict division between nature and culture, characteristic of contemporary Western thinking, was not present. Thus it should come as no surprise that we find 'natural' elements and relations between humans and nature included in rock art as well.

The ethnographic record also describes numerous taboos related to the whale hunt. One interesting observation is the distancing required between the male hunter and his wife before and during the hunt (Lucier & VanStone 1995: 59). However, after a successful hunt, the ensuing feasting also included the 'meeting' of men and women. This could be what we see at the rock carvings of Yerpín Pudas 3, where four copulation scenes are depicted next to a beluga and one of the couples is virtually on its way into the whale (see Fig. 3: 3).

The beluga hunt at River Vyg must have taken place during late summer or autumn. One of the carved scenes depicts hunting geese, an activity that is likely to have occurred in July–August. There are also depictions of winter/spring hunt of bear, and winter hunt of elk. In this manner the rock carvers have selectively depicted activities associated with different seasons, with a focus on large mammal hunting. Among the Evenki of western Siberia, the production of rock art was a central part of the rituals associated with elk hunt both before, during and after the hunt (Okladnikov 1970: 92f). The Chukchi of eastern Siberia likewise painted animals in blood and ochre onto the rocks as part of their hunting rituals (Sarychev 1802: 161, quoted in Okladnikov 1970: 102). Elaborate rituals connected to the beluga hunt are described amongst the Inuit (Murdoch 1892; Thornton 1931; Lantis 1938; 1940; 1947; Lucier & VanStone 1995), and while these did not involve making of rock art, I find it likely that the rock art of River Vyg was associated with the ritual aspects of the whale hunt. Rituals are often connected to various stages of the hunt and hunting season. However, this does not render rock art as a mere expression of 'hunting magic' or 'sympathetic magic' as imagined in the early studies of rock art.

CASE STUDIES OF ROCK ART AND LANDSCAPES

Through the following three case studies from Vyg rock art, I aim to show the different ways in which the physical landscape or environment is visualized in the rock art, and how the topography of the rock surface (or the micro-landscape) is included as an element in the information content of Vyg rock art.



Fig. 5. Tracing of New Zalavruga 8 from Savvateyev 1970 (fig. 48).

Case study 1: New Zalavruga 8

The panel at New Zalavruga 8 (see Fig. 5) consists of several figures, the most striking of which is a large whale hunting scene that dominates the panel. Another scene depicts a man hunting an elk with his bow and arrow. One can also see two rows of bears, a whale, two spears or harpoons, a swan, a seabird and human figures. My main focus in this composition is on the whale hunting scene, which depicts six boats hunting a single beluga whale. The people in the boats have harpooned the whale. One can see 32 human figures standing in the boats. A careful examination of the boats shows that a large part of the area where the humans would have been represented in the boat is eroded, and it may be estimated that the original number of people probably exceeded 50. The boats all have an elk-head in the stem. The beluga being hunted is almost certainly a female 'mother', as evidenced by the 'newborn' calf on her right side. A thin line between the mother and calf can be interpreted as the umbilical cord. At the other whale hunting scenes (e.g. New Zalavruga 13) the boats surround the whale and the rock surface is virtually flat. At New Zalavruga 8, on the other hand, the boats are connected by 'ropes' from the harpoon hanging behind the whale, and the scene can thus be seen as being 'in motion'. This might offer a clue as to where the hunt took place. It is conceivable that the whale hunt depicted at New Zalavruga 8 actually happened in the river estuary

or the river itself: the boats are depicted as if they were driven behind the whale against the stream of the river, perhaps at small rapids.

The level of inclination of the panel where the whale hunting scene is depicted is c. 10°. This means that the scene could have been placed there so as to visualize the inclination of the river. Even today, the area where the maritime motifs are found exhibits an almost constant, gentle flow of water over the cliffs (Fig. 5). In other words, the scene may depict a flowing river in a riverine landscape, where a beluga 'mother' swimming upstream together with her 'newborn' calf are being preyed by a large group of hunters in boats. The interaction between the rock surface and the rock art seems evident. The behavioural pattern of the beluga suggests that this hunt must have occurred during midsummer or autumn.

Case study 2: New Zalavruga 4

When one looks at the New Zalavruga 4 panel, it immediately becomes evident that this is a composition made up by several scenes (Figs. 6–8). The main division is between the winter hunting scene on the left, consisting of three skiers hunting elk with spears and bows, and the figures and scenes to the right of said scene. If one looks closer, one will see that in the beginning of this hunt there are three ski pole marks on both sides of the track, but eventually the narrative separates into three

trajectories, as each of the skiers separates from the group to hunt their own elk. The elk most probably represent a cow with two calves, not an uncommon sight during the winter. The skiers walked on the flat top of the rock surface before sliding down a slight slope, then walked again on a horizontal surface and caught up with the elk – a narrative that is coded in the way the ski tracks have been depicted. Short tracks depict walking and long tracks indicate sliding downhill. The ski marks also indicate the changing topography (Savvateyev 1970; Bradley et al. 2002: 280; Helskog 2004; Janik et al. 2007).

In the central part of the panel the whale hunting scenes dominate. To the right of the panel one sees several terrestrial hunting scenes, including two scenes depicting bear hunt with spears and bow and arrow, as well as a depiction of elk hunt with bow and arrow. There is also a person with bow and arrow hunting what could be a bird in a tree, but judging by the tracks beneath the tree, it could also be a bear. On the lower right of the panel one sees a whale hunting scene, and there is a whale hunting scene also in the upper right of the panel.

How, then, are these figures and scenes related to each other? Helskog (2004: 279–80) has interpreted the whole composition as a representation of seasonal activities. To the left of the panel the winter hunt is represented, while the beluga hunt represents summer, and thus the motifs on the en-

tire panel may be interpreted as moving from winter to summer (Bradley et al. 2002: 493; Helskog 2004: 279f). I agree with Helskog in interpreting the different scenes as representations of seasonal activities and thereby visualizing the different seasons. However, Helskog also notes that on the right hand side of the panel the whole year is represented by the skier hunting the bear and the whale hunt (Helskog 2004: 279). This shows that we cannot ‘read’ these panels in a linear fashion.

An examination of the physical landscape of River Vyg offers a complementary interpretation to the panel. During the Neolithic, the whole area would have been a complex maze of islands and riverbanks in a river estuary. The estuary would have changed constantly and, with changing sea levels, the landscape in general would have been in a state of change. The rock surface at New Zalavruga consists of a flat horizontal area where water collects in shallow pools between the carved panels. If the pools should dry up, none of the carvings in the area would collect water. However, even today there is virtually always water in these pools, and this suggests that the pools must have been more stable when the shoreline was closer to the carvings. One might also suggest that the pools were filled by the tide, but this might be pushing the interpretation a bit too far.



Fig. 6. Photo of an elk hunting scene at New Zalavruga 4. Photo: Jan Magne Gjerde.

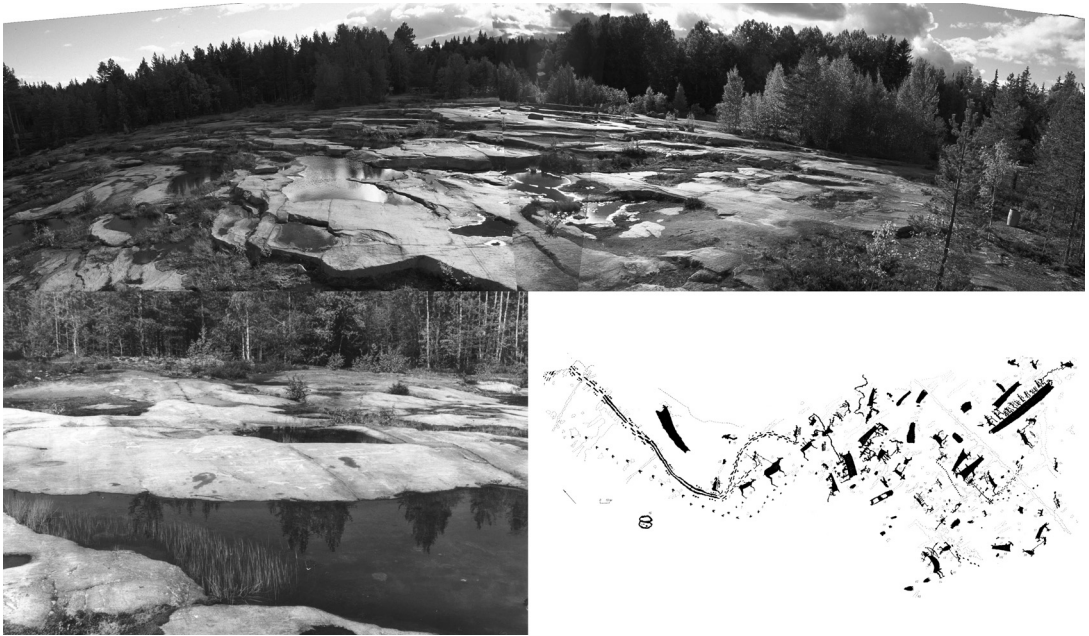


Fig. 7. Top: general view towards the north from the southern part of New Zalavruga. Bottom left: New Zalavruga 4 with a pool of water in front of the panel. Bottom right: tracing of New Zalavruga 4 according to Savvateyev (1970: plate 35). Illustration and photos: Jan Magne Gjerde.

Following this idea, the whole area of New Zalavruga can be seen as a micro-landscape of islands or islets. The panels with rock art, such as New Zalavruga 4, could then be seen as islands as not all potential panels were chosen for rock art (see Fig. 7). By dividing the activities and the figures to terrestrial and marine activities, an interesting pattern emerges: the entire panel

could be interpreted as representing two islands surrounded by the sea (see Fig. 8). The landscape they are depicting on the rock surfaces reflects the surroundings and could be seen as a reflection of a physical landscape. This shows that the scenes, compositions and panels could be made up of several landscapes or stories embedded with different meaning interwoven in the rock surface.

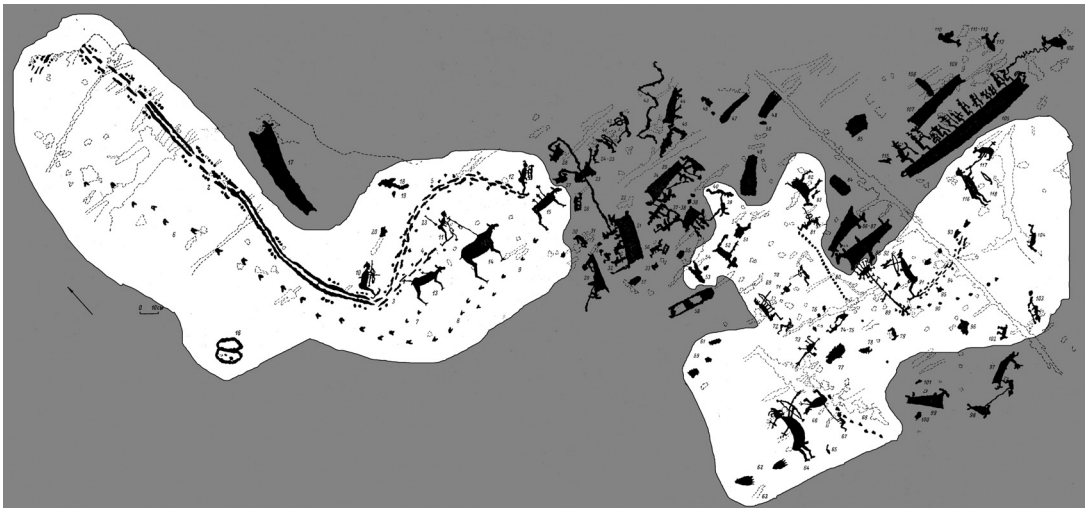


Fig. 8. Tracing of New Zalavruga 4 according to Savvateyev (1970: plate 35). The tracing has been modified by marking the area with maritime motifs with grey. Illustration: Jan Magne Gjerde.

Case study 3: Landscape motif 'the river'

A part of what is arguably one of the most fascinating compositions in the hunter rock art of north-western Europe was noted already by Ravdonikas (1938: plate 19). The carved line Ravdonikas had found continued into the section of Zalavruga that was uncovered by Savvateyev and his crew and the panel was named New Zalavruga 15 (Savvateyev 1970: plate 70). The composition has been interpreted both as a whale hunting scene and as a depiction of a river (Sawwatejew 1984: 149).

Indeed, a part of the composition is formed by a long line that could represent the river. The boats

are connected to this line and the line is bending, twirling through the landscape just as the River Vyg does. In addition to the boats, different types of activities or tasksapes are depicted along the river (for instance, humans carrying elk-head poles at the lower part of the composition, see Fig. 9). There are no beluga whales connected to this composition and only one beluga located to the far right of this panel. The best interpretation of this composition is that it is depicting a river. If so, this is to my knowledge the only case in the hunter art of north-western Europe where the carvings depict an element of the physical landscape.

Through these case studies one can see how the physical landscape is included in the rock

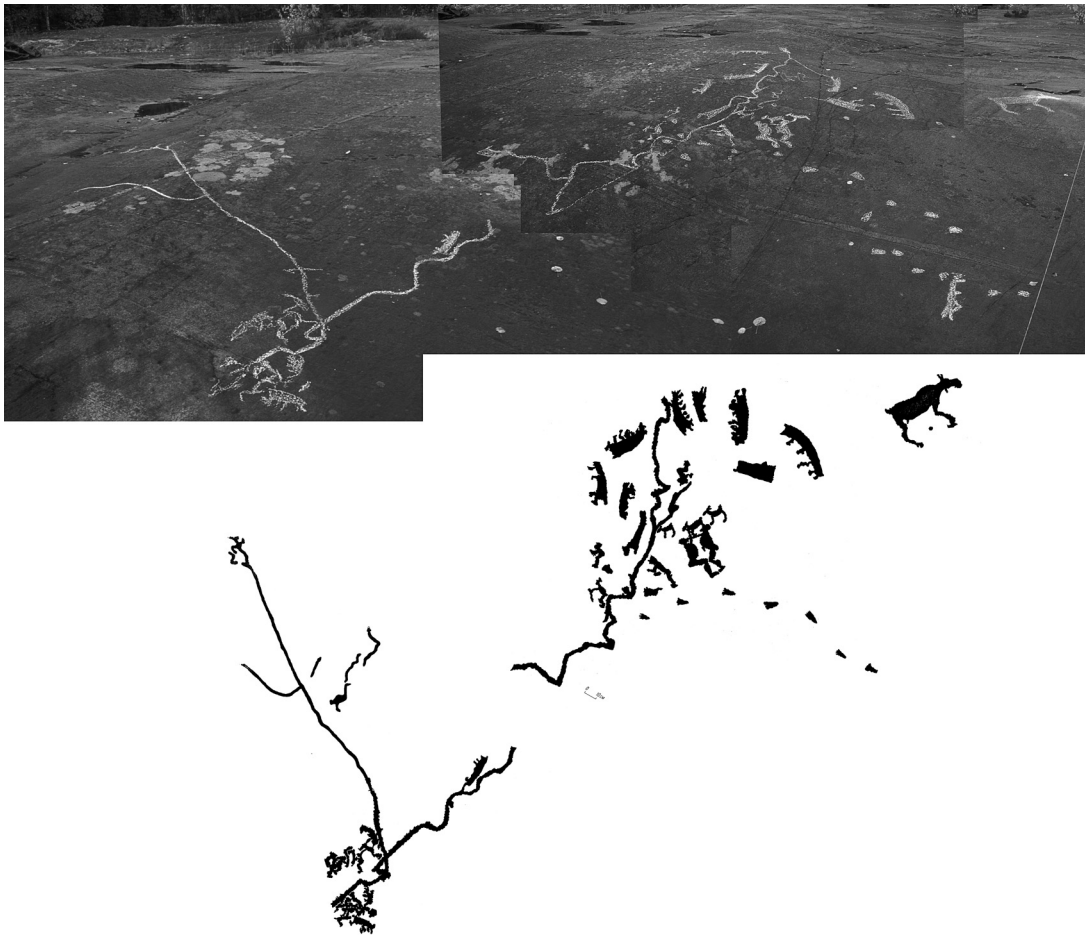


Fig. 9. The 'river' depicted at the Vyg carvings (New Zalavruga 15). Tracings according to Savvateyev (1970: plate 70) and Ravdonikas (1938: plate 19). The tracings of Savvateyev and Ravdonikas are here reworked and joined together, with the left section of the 'river' being Ravdonikas's documentation. One can here clearly see that Ravdonikas and Savvateyev documented the carvings using different techniques. Above, a photomosaic of the same composition, made better visible by chalking. Illustration and photo: Jan Magne Gjerde.

art at different levels. As a result, we might get closer to understanding how the landscape was experienced in the past by the people making and using the rock art.

CHANGING LANDSCAPES – CHANGING MOTIFS – CHANGING SOCIETY?

In order to get a better understanding of past landscapes and how they were lived in, reconstructions of the environment are essential. The main environmental change in the Vyg area would have been the Holocene land uplift, which has caused changes in the shoreline and hence a constantly changing river estuary. It is also very important to relate the past landscape to time, as without a proper consideration of chronology one might, for example, end up studying figures, motifs or panels in relations that were not originally there. Also, if we do not situate the rock art in time it becomes very problematic to relate it to the rest of the archaeological record.

The geographical distribution of motifs and changes within the tradition can be seen as representing different chronological or regional units. Analysing such distributions and changes within motifs is also one of the main methods for looking at culture contacts reflected in rock art. In the Vyg area the distribution of swans and belugas seem to be the main indicators for such changes and/or variations. For example, the distinctive ('Lake Onega style') large swans found at Besovy Sledki North are not present at any of the Zalavruga panels. The dating of these panels suggests that the Besovy Sledki North carvings could have been made as much as 3300 years earlier than the latest of the Zalavruga carving. If one looks at the distribution of the beluga whales and the beluga hunting scenes, it can be observed that they 'disappear' at the final stage of New Zalavruga 15 and are virtually absent at the Old Zalavruga panels. The beluga whales and the beluga hunting scenes could have disappeared due to the changing landscape (land uplift and changing river estuary) which hindered the beluga from penetrating this far up the river – a development that, as noted, has been recorded at the River McKenzie estuary in Canada (McGhee 1974). One might say that the previous river estuary area was 'replaced' and the river became the main element of the environment at Zalavruga. The area downstream from this could have been

less favourable for the beluga hunt and perhaps this resulted in the animal no longer being depicted in the carvings of this area.

The inclination in the topography of the Vyg area is quite small, and therefore the effects of land uplift must have been tangible to the people living in the area, changing the landscape virtually from generation to generation. Their shore became part of the river. This could have led to changes in the meaning of the place. At New Zalavruga 15, we find the large 'river'-composition, which could be an expression of the enhanced role of the river in the landscape and so also in their myths and stories. This 'end' of Zalavruga is also expressed through the depiction of large elk and the two rows of elk that dominate the Old Zalavruga site. With the beluga disappearing from this area, the elk could have acquired a different and enhanced role, both in an economic and a religious respect. The massive elk of Old Zalavruga dominate the visual experience of the panel, giving the impression that they also dominate their cosmological world symbolically, perhaps implying a change in ideology. The large elk are placed in the middle of the panel, and rows of elk form lines along the edges of the 'world' (the edge on the rock surface in the west and the water in the south). A study of figure superimpositions shows that the large boats in the same panel were made before the large elk. Another indication that the large elk were made last is also the fact that the figures at the northern part of the Old Zalavruga panel show clear similarity in size and style with the carvings of New Zalavruga.

Furthermore, it may be reasonably assumed that when such a central resource as the beluga whale 'disappeared', this may have led to major changes within the society and perhaps even chaos, during which a restructuring of society could have been initiated. Some of the inter-societal co-operation (of the kind discussed by Lucier & VanStone 1995) associated with the whale hunting places could have been ruined and negotiations of both economic and religious character could have ensued. A strong indication of some sort of an upheaval among people is that the only panel where hostile relations are depicted is at Old Zalavruga. There, several scenes show people shooting arrows at each other, and some of the people represented have been pierced by arrows.

LANDSCAPES IN THE VYG AREA ROCK ART

The study of rock art in landscapes can be carried out at several levels: at inter-regional levels, at regional levels, at local levels, at site levels or at panel levels (Sognnes 2002: 198). One can also study rock art and landscapes at the level of compositions, scenes or even motifs. It is important to study the landscape on different levels if one is to even approach a holistic view of rock art and landscapes. The case studies presented above demonstrated in different ways the manner in which rock art and landscape interact at different levels at River Vyg. The micro-topography becomes part of the stories carved in the rocks, which, moreover, also relate to the macro-topography and changes in the landscapes (macro-landscape). The unique location of the estuary of River Vyg has most likely been a crucial node in the hunter-gatherer landscape for more than 3000 years during the Stone Age.

The Vyg area may not necessarily have been a meeting place at which people congregated during particular times of the year; it was rather a natural node in the hunter-gatherer landscape that people would regularly pass. There would always be people at Vyg. Therefore, Vyg would have been a central place for communication and exchange, both from a functional and ideological perspective. Communication and exchange would have been interwoven in people's worldview and perception of the landscape, with River Vyg functioning as a meeting place between places, humans, animals and spirits.

Ethnographic sources have given us a better understanding of prehistoric landscapes. They may also shed light on how the whale hunt took place and how rituals were connected to the whale hunt and the production of rock art at River Vyg. The whale must have been an important resource to the people that participated in the whale hunt, but hunting large game was dangerous. The dangers connected to the whale hunt have been suggested as one of the reasons for the wide-ranging whale hunting rituals (Lantis 1938: 450f). This may also be one of the reasons why hunting scenes are frequently depicted at Vyg, which offer information on the relation between economy and ideology and how they interacted in prehistory.

Most likely, the Vyg estuary was an aggregation site, where people from many groups met to

take part in large-scale whale hunt such as has been described by ethnographers in the McKenzie region in Canada. At the large aggregation sites in Canada, records show that between 600 and 2000 people gathered at these nodes in the landscape during the whale hunt (Lucier & VanStone 1995: 41f). The rich Stone Age settlement record from the Vyg estuary likewise suggests a large number of people gathering in the rock art area (Savvateyev 1977b; 1988). The area must have been attractive and most likely also functioned as a meeting place. Such meeting places play a role in the exchange of goods, information and knowledge adding to social interaction. Ethnographically this is documented for instance by the large whale hunting festivals at the end of the hunting season, which included feasting, dancing and exchange of goods (Lantis 1947: 67).

At the Vyg estuary, the landscape would be constantly changing. The topographical changes were comprehensive due to the fast rate of land uplift in an otherwise flat landscape, with constantly shifting shorelines and river estuary. The consequences to the individuals must have been dramatic, including changes where familiar places of great importance could lose their meaning, or their function or meaning might change. Thus it is possible that places in the topography that changed in character (such as transitions between calm running water to rapids) were given special importance. While the shoreline was moving, the Shoyrukshin waterfall/rapids were stable, and this is where the rock art of Besovy Sledki is situated. This may be one of the reasons why concentrations of rock art are placed at stable landscape features, such as waterfalls or rapids, with carvings made at the 'same place' for several thousand years, as is the case at the Besovy Sledki/Yerpin Pudas area or the rapids of Nämforsen in northern Sweden.

Several examples show that the inhabitants of the Vyg area included the topography in their rock art. The Vyg carvings were situated in a river estuary dominated by coastal rock slopes, riverbanks and small islands. The whole of the Zalavrug area can be seen as a miniature landscape of the topographical setting at River Vyg, where the panels of rock art act as small islands in an archipelago. This can be seen at New Zalavrug 4 (Fig. 8), for example. Later on, when the surrounding area had changed, Zalavrug was no longer situated on the coastal shore zone but rather on the riverbank. This is when the 'river'

at New Zalavruha 15 was carved. At New Zalavruha 8, on the other hand, one can see how the natural elements are employed in visualizing the topography: the beluga hunting scene is depicted in the running water, which acts as a miniature river, and the whale hunt occurs in the transition between the river estuary and the river.

The changing landscape of the Vyg estuary led to changes in the lives of the people living in the region. The people had to structure their lives so that they interacted with the landscape in a wide sense. Meaning was expressed through experiences of the surroundings, as represented in the rock art. Their relationships to the surroundings can be seen as interwoven landscapes represented in rock art. As Ingold (2000: 193) put it: 'In short, the landscape is the world as it is known to those who dwell therein, who inhabit its places and journey along the paths connecting them'. For the people dwelling in the Vyg area, this would have led them to build their lives and their world around the environment, and thus giving meaning to the macro-landscape through their perceptions and changing perceptions that were visualized and acted out in the rock surfaces. In short, their lives were formed by interwoven landscapes.

NOTES

¹ These sites are radiocarbon-dated to AD 1030–1900. Beluga bones and hunting equipment are found on the sites, and there is a continuity of occupation between the sites. The Radio Creek site (dated between AD 1350–1630) was abandoned after c. 300 years of use.

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AFTERWORD

This paper was initially written for a planned conference publication related to the *Cognition and Signification in Northern Landscapes* conference held in Bergen in 2004. It was to be published in the year 2006. Since there is as of yet no indication of such a publication, the paper is now slightly rewritten and submitted to *Fennoscandia archaeologica*.

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